#### COMMONWEALTH OF VIRGINIA

#### STATE CORPORATION COMMISSION

AT RICHMOND, MAY 29, 2008

OULUMENT CONTROL

APPLICATION OF

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APPALACHIAN POWER COMPANY

CASE NO. PUE-2007-00068

For a rate adjustment clause pursuant to § 56-585.1 A 6 of the Code of Virginia

## ORDER ON RECONSIDERATION

On July 16, 2007, Appalachian Power Company ("APCo" or "Company") filed an application with the State Corporation Commission ("Commission") for "approval of a rate adjustment clause for recovery of allowable costs of a new, carbon capture compatible, clean coal powered generation facility" pursuant to § 56-585.1 A 6 of the Code of Virginia ("Application"). APCo "file[d] this Application seeking to begin recovery of a return on, *i.e.*, the financial carrying costs of, construction work in progress ('CWIP'), including planning and development costs, of a proposed [629 MW] Integrated Gasification Combined Cycle ('IGCC') electric generating facility in Mason County, West Virginia [('IGCC Plant')], adjacent to APCo's Mountaineer Generating Station." The Company stated that the projected cost of the IGCC Plant "is approximately \$2.23 billion, of which approximately \$1 billion will be allocated to Virginia jurisdictional customers whose rates are regulated by the Commission."

Specifically, APCo requested the Commission: "(1) to approve the rate adjustment clause proposed herein; (2) to find that construction of the proposed IGCC facility by the

<sup>&</sup>lt;sup>1</sup> Application at 1.

 $<sup>^2</sup>$  Id. at 2. See also APCo's March 19, 2008 post-hearing brief at 43.

<sup>&</sup>lt;sup>3</sup> Application at 2.

Company is reasonable and prudent; and (3) to grant the Company further authority as may be necessary or appropriate."<sup>4</sup>

On April 14, 2008, the Commission issued a Final Order in this proceeding, which denied the Application. The Commission found as follows: "[I]t is neither reasonable nor prudent for APCo to construct the proposed IGCC Plant based on the record before us. Accordingly, we do not approve the rate adjustment clause requested in this proceeding."<sup>5</sup>

On April 29, 2008, APCo filed a Petition for Reconsideration and/or Rehearing ("Petition") pursuant to 5 VAC 5-20-220 of the Commission's Rules of Practice and Procedure. APCo states that the Commission "should reconsider denial of that Application" for the following reasons:

- 1. The Final Order ignores completely the specific Commonwealth Energy Policy to promote the development of IGCC technology and the statutory requirement that the Commission recognize that policy.
- 2. The Final Order makes no finding on the threshold issue whether the Company needs new generating facilities to provide adequate and reliable electric service to its customers in the future.
- 3. Denial of the Application based on IGCC cost uncertainties is inconsistent with the Commission's March 31, 2008 approval of Dominion Virginia Power's (DVP) proposed coal-fired generating plant in Wise County given the cost uncertainties of post-combustion carbon capture at that plant.
- 4. The Final Order creates a standard for cost estimate certainty that could not be satisfied on reasonable terms in this case, and it ignores credible cost evidence presented by the Company.
- 5. The Final Order ignores completely, and could have the effect of nullifying, the March 6, 2008 approval of this IGCC plant

<sup>&</sup>lt;sup>4</sup> *Id.* at 4-5.

<sup>&</sup>lt;sup>5</sup> Final Order at 2-3.

by the Public Service Commission of West Virginia and that Commission's recognition of the need for the plant, the viability of IGCC technology, the need for an updated cost estimate and, importantly, the need for accommodation of regulatory requirements by that Commission and this Commission.<sup>6</sup>

On April 30, 2008, the Commission granted reconsideration for the purpose of continuing our jurisdiction over this matter to consider the Petition.

NOW THE COMMISSION, upon consideration of this matter, denies the Petition. We will address APCo's assertions, as listed above, *seriatim*.

### Commonwealth Energy Policy

In its Petition, APCo notes that Va. Code § 67-102 provides in part as follows: "[I]t shall be the policy of the Commonwealth to: . . . [p]romote research and development of clean coal technologies, including but not limited to integrated gasification combined cycle systems. . .," and "[a]ll agencies . . . of the Commonwealth, in taking discretionary action with regard to energy issues, shall recognize the elements of the Commonwealth Energy Policy and where appropriate, shall act in a manner consistent therewith."

The Petition, however, fails to quote a critical portion of this same statute:

D. The Commonwealth Energy Policy is intended to provide guidance to the agencies and political subdivisions of the Commonwealth in taking discretionary action with regard to energy issues, and shall not be construed to amend, repeal, or override any contrary provision of applicable law. The failure or refusal of any person to recognize the elements of the Commonwealth Energy Policy, to act in a manner consistent with the Commonwealth Energy Policy, or to take any other action whatsoever, shall not create any right, action, or cause of action or

<sup>&</sup>lt;sup>6</sup> Petition at 1-2.

<sup>&</sup>lt;sup>7</sup> Va. Code §§ 67-102 A 3 and C.

provide standing for any person to challenge the action of the Commonwealth or any of its agencies or political subdivisions.<sup>8</sup>

Thus, the Commonwealth Energy Policy does not supersede the other statutory standards that the Commission must apply in this proceeding. Indeed, APCo acknowledged during the hearing that the Commonwealth Energy Policy does not override this Commission's obligation to determine whether the proposed IGCC Plant is reasonable or prudent. The Commission applied the specific statutory standards applicable to the Application and, as noted above, found that it is neither reasonable nor prudent for APCo to construct the proposed IGCC Plant based on the record before us. Consideration of the Commonwealth Energy Policy does not override our statutory obligation, as APCo itself admitted during the evidentiary hearing, nor our findings in this regard.

#### Need

The Petition states that, by not including a finding on the need for additional capacity, "the Final Order does not satisfy the statutory requirements of § 56-585.1 A 6 and, thus, contains an error of law. See, Volkswagen of America v. Smit, 266 Va. 444, 587 S.E.2d 526 (2003) [("Volkswagen")]; Browning-Ferris Industries v. Residents Involved In Saving The Environment, 254 Va. 278, 492 S.E.2d 431 (1997) [("Browning-Ferris Industries")]." The Petition provides no specific citation to or explanation of the particular portions of the above cases that support the contention that the Commission has committed an "error of law." We note, however, in the

<sup>&</sup>lt;sup>8</sup> Va. Code § 67-102 D (emphasis added).

<sup>&</sup>lt;sup>9</sup> Tr. 867, 891-892 (APCo witness Waldo) ("Q. So you agree then that it's still up to the Commission to determine if that technology is reasonable and prudent? A. Absolutely. . . . Q. Okay. Now, when you're talking in your rebuttal testimony about the policy of the Commonwealth, you didn't intend to suggest that the Commonwealth's policy was supposed to override the Commission's obligation to evaluate reasonableness and prudence of this IGCC project, did you? A. No. I did exactly what I believe the policy states, and that is it is guidance – Q. Okay. A. – not directives.").

<sup>&</sup>lt;sup>10</sup> Petition at 5.

*Volkswagen* case the Supreme Court of Virginia held that "because the administrative agency charged with enforcement of the statute failed to undertake the analysis and make the *predicate* finding required by the statute, the agency's resulting determination must be set aside." <sup>11</sup>

The above principle from *Volkswagen* does not require the Commission to make a finding of lack of need before denying the Application. Irrespective of the issue of need, we must still deny the Application, having found that it is neither reasonable nor prudent for APCo to construct the proposed plant based on the record before us. Further, contrary to APCo's suggestion, the Commission has no statutory obligation to suggest alternative generation measures.<sup>12</sup> The Commission must act on the specific Application placed before it in accordance with the applicable statutory standards.

This Commission made no finding of need for this particular plant for the reason stated in the Final Order: APCo's Application failed the "reasonable or prudent" test under Va. Code § 56-585.1 D. Our finding that the Application failed the "reasonable or prudent" test for this particular plant by necessity rendered moot a finding of need *for this particular plant in this particular Application*. Furthermore, we did not make a finding in our Final Order that there was no need for new generation in general, even though several participants urged us to find that APCo had not established a need for new base load generation by 2012.<sup>13</sup> We do not deny that

 $<sup>^{11}</sup>$  Volkswagen, 266 Va. at 453, 587 S.E.2d at 532 (emphasis added) (citing Browning-Ferris Industries, 254 Va. at 284-285, 492 S.E.2d at 435).

<sup>&</sup>lt;sup>12</sup> Petition at 5.

<sup>&</sup>lt;sup>13</sup> See, e.g., The Office of the Attorney General's Division of Consumer Counsel's March 19, 2008 post-hearing brief at 3, 5-6 ("[T]he record in this proceeding establishes that the capacity need by 2012 is questionable at best. . . . [T]he evidence does not support APCo's argument that it has a critical need for baseload capacity. . . . This evidence does not support the contention that AEP-East will have an underlying critical baseload need in 2012."); Old Dominion Committee For Fair Utility Rates' March 19, 2008 post-hearing brief at 5 ("APCo failed to carry its burden to show that new base load coal plant capacity would be needed by 2012, the commercial operation of the IGCC plant."); and Commission Staff's March 19, 2008 post-hearing brief at 6 ("The record does not support the Company's assertion that base load generation is required by 2012.") (emphasis in original).

meeting the long-term power needs of APCo's Virginia service territory requires planning for several years in advance, as APCo states. This Commission, however, did not have in front of us in this case the question of a *general* need for additional generation. The question of need in front of us was specific *to this proposed plant*, and it was rendered moot by a finding that APCo's proposal failed the statutory test of reasonableness or prudence.

Accordingly, APCo's insinuations that this Commission has hampered the Company's carefully developed plans for future generation are misplaced. <sup>14</sup> Submitting an unreasonable and imprudent proposal for a new power plant to this Commission, as APCo did in this case, is not the way to address the Company's comprehensive plans for meeting the future power needs of APCo's Virginia service territory. Virginia Code § 56-585.1 A 6 permits APCo to "petition the Commission for approval of a rate adjustment clause" to recover the costs of a specific generation facility. If the Company does not establish that construction of the proposed facility is reasonable or prudent, the Commission must deny the request. The instant case is not a vehicle for general, comprehensive resource planning; that is, the statute under which APCo filed its Application is not a general integrated resource planning tool for addressing the Company's comprehensive short- and long-term generation needs. Indeed, the Commission notes that in 2008 the Virginia General Assembly added Chapter 24 to Title 56 of the Code of Virginia, which expressly requires utilities to file, and the Commission to analyze and review, integrated resource plans. 15 Thus, cases under this new statute – in contrast to Va. Code § 56-585.1 A 6 – will serve as the means for addressing APCo's general, comprehensive integrated resource planning.

<sup>&</sup>lt;sup>14</sup> See Petition at 5.

<sup>&</sup>lt;sup>15</sup> See Chapter 479 of the 2008 Virginia Acts of Assembly, to be codified as Va. Code §§ 56-597, 56-598, and 56-599.

## Southwest Virginia Coal Plant (Case No. PUE-2007-00066)

Contrary to APCo's contentions, our orders in the Southwest Virginia coal plant case (Case No. PUE-2007-00066) and in this proceeding are not inconsistent with respect to the treatment of carbon capture and sequestration issues. In both instances, the Commission focused on the application before it, that being the construction of a coal-fired base load generator. In neither case did we find that the claimed potential for carbon capture and sequestration would support the construction of an otherwise imprudent or unreasonable plant.

The Commission does not dispute that it is important for an applicant to consider the implications of potential carbon limitation requirements when considering the construction of a new generation facility. Indeed, the General Assembly enacted legislation providing an enhanced rate of return associated with the construction of a facility that is "carbon capture compatible, clean-coal powered." However, the Code of Virginia does not require the Commission to approve a rate increase associated with an otherwise imprudent or unreasonable plant merely because it is or may be carbon capture compatible.

Here, the Commission found that the Company's proposed coal generation plant, absent carbon capture and sequestration analysis, did not pass the reasonable or prudent test for the reasons set forth in the Final Order. We will not detail here the manifold differences of material facts in the evidentiary records of the instant case and of Case No. PUE-2007-00066. We also observe that, in the Southwest Virginia coal plant case, the General Assembly made a policy decision that the construction of such "a coal-fueled generation facility that utilizes

<sup>&</sup>lt;sup>16</sup> See Petition at 6-7.

<sup>&</sup>lt;sup>17</sup> See Va. Code § 56-585.1 A 6.

<sup>&</sup>lt;sup>18</sup> See, e.g., Final Order at 4-16.

Virginia coal and is located in the coalfield region of the Commonwealth . . . is in the public interest." In sum, Case No. PUE-2007-00066 was materially different from the case at bar, which APCo ignores in making its allegation of discriminatory treatment in its Petition.

The Company mistakenly suggests that the Commission denied its Application solely because of cost uncertainties related to future carbon capture and sequestration.<sup>20</sup> To the contrary, the Application did not ask the Commission to approve, in this proceeding, any specific costs associated with *potentially* installing carbon capture and sequestration facilities at some point in the future. Rather, the Commission was required to determine, based on the record developed in this case, whether it is reasonable or prudent for APCo to construct the proposed IGCC Plant *absent* carbon capture and sequestration, and the Commission found that it is not:

The Commission has the statutory obligation to determine reasonableness or prudence, and the Company has not established, based on the record developed in this case, that construction of its proposed IGCC Plant is reasonable or prudent. . . . Importantly, the Company also has not, at this time, provided a credible cost estimate for the proposed plant *absent* carbon capture and sequestration. <sup>21</sup>

The Company, however, argued that the *potential* for future carbon capture and sequestration supports a finding that it is reasonable or prudent, now, to construct the proposed IGCC Plant absent capture and sequestration. Indeed, the Final Order explained this as follows:

The asserted value of APCo's proposed IGCC Plant – to overcome the high and unknown capital costs, unproven track record, and general uncertainty involving an IGCC generation project of this size – is its potential cost effectiveness in capturing and sequestering CO<sub>2</sub>. Specifically, APCo stated that '[w]hat clearly sets IGCC technology apart from others is its *potential* to separate

<sup>&</sup>lt;sup>19</sup> Va. Code § 56-585.1 A 6.

<sup>&</sup>lt;sup>20</sup> See Petition at 7.

<sup>&</sup>lt;sup>21</sup> Final Order at 10, 16-17 (emphasis in original).

and sequester  $CO_2$  emissions from the process at a significantly lower cost than conventional technologies . . . [and it] is anticipated that environmental regulations will require the removal of  $CO_2$  at some point in the future.' Indeed, APCo witness Chodak succinctly explained why the Company is proposing this plant at this time: 'This is about  $CO_2$ . This is about us recognizing that the forecast is for rain and so we are going to bring an umbrella. That is what this is about.'<sup>22</sup>

As a result, the Final Order explicitly addressed APCo's assertions in this regard. Though not unmindful of the continuing developments in carbon capture and sequestration, the Commission must apply Virginia law and make findings limited to the case before us.

Accordingly, the Commission found that, based on the record developed herein, the possibility of future carbon capture and sequestration did nothing to move this Application from its otherwise unreasonable and imprudent position:

The Company asserted that the value of this project is directly related to: (1) potential future legal requirements for carbon capture and sequestration; and (2) the proposed IGCC Plant's potential ability to comply cost effectively with any such requirements. Both of these factors, however, are unknown at this time *and do not overcome the other infirmities in the Application*. The legal necessity of, and the capability of, cost-effective carbon capture and sequestration in this particular IGCC Plant, at this time, has not been sufficiently established to render APCo's Application reasonable or prudent under the Virginia statute we must follow.<sup>23</sup>

Indeed, the Final Order explained that -according to APCo-(1) there are no federal or state carbon capture and sequestration regulations that need to be complied with at this time for its generation plants located in West Virginia, and (2) APCo is speculating on the requirements

<sup>&</sup>lt;sup>22</sup> *Id.* at 13 (emphasis added) (citations omitted).

<sup>&</sup>lt;sup>23</sup> *Id.* at 16 (emphasis added).

of any future regulations.<sup>24</sup> Moreover, the Company acknowledged that, depending on the exact form of potential future regulations and the cost-effective alternatives stemming therefrom, it may not need to install *any* carbon capture and sequestration equipment on the proposed IGCC Plant.<sup>25</sup> As a result, the Commission concluded as follows:

[T]he unknown nature of potential future regulations driving APCo's Application herein makes it impossible to determine, at this time, the specific carbon capture and sequestration retrofit that may be needed in the future – or, moreover, whether it will *ever* be cost efficient to retrofit the proposed IGCC Plant for carbon capture and sequestration.<sup>26</sup>

In short, the Company asserted that the *potential* for future carbon capture and sequestration supported approval of this proposed IGCC Plant, at this time, without such capture and sequestration based on the facts presented in this case. For the reasons stated in the Final Order, the Commission found that the "legal necessity of, and the capability of, cost-effective carbon capture and sequestration in this particular IGCC Plant, at this time, has not been sufficiently established to render APCo's Application reasonable or prudent under the Virginia statute we must follow."<sup>27</sup>

<sup>&</sup>lt;sup>24</sup> See id. at 13-14. Though not part of our decision in this case, we note that subsequent to the Final Order American Electric Power's Chairman and Chief Executive Officer, Michael G. Morris, was quoted as stating that generators have to convince state utility regulators to pay extra for the next generation of coal plants, and that "[y]es, it's more expensive than pulverized coal, but this country has spoken on global warming and we have to comply with the laws." Bernard Woodall, INTERVIEW – AEP CEO says will wait to build US nuclear plant, Reuters, Apr. 29, 2008 (emphasis added). As discussed herein and in the Final Order, however, APCo acknowledged in this proceeding that there currently are no such laws with which it must comply for purposes of its proposed IGCC Plant.

<sup>&</sup>lt;sup>25</sup> See Final Order at 14.

<sup>&</sup>lt;sup>26</sup> Id. at 14 (emphasis in original) (footnote omitted).

<sup>&</sup>lt;sup>27</sup> Id. at 16.

### Cost Estimate

The Petition asserts that the Commission, in finding that APCo's cost estimate for the proposed IGCC Plant is not credible, did not give sufficient weight to the Company's proffered evidence.<sup>28</sup> The Final Order, however, clearly discusses the evidentiary basis supporting the Commission's findings.

The Petition further states that:

Estimating costs of plants based on older, more familiar, technologies are more certain, and fixed price contracts might be obtained for such plants. The circumstances are different in this case because there are relatively few IGCC plants. Therefore, requiring a fixed price contract as a prerequisite for approving the IGCC plant cost estimate creates a virtually insurmountable obstacle.<sup>29</sup>

This Commission did not state in our Final Order that *only* a fixed price contract would meet the statutory requirement of a finding of reasonableness or prudence under Va. Code § 56-585.1 D. While a fixed price contract could be evidence supporting a finding of reasonableness or prudence, it is not a mandatory requirement. The cost estimate contained in APCo's Application, for the various reasons stated in detail in our Final Order, was not credible, and not only because APCo lacked a fixed price contract.

Further, as APCo acknowledges in its quote above, "there are relatively few IGCC plants." Yet, while acknowledging this much, APCo does not acknowledge in its Petition the fact that there are *no* IGCC electricity generating plants with proven track records in commercial service of the size that APCo proposes. In contrast, the Final Order explicitly addresses this matter and explains, for example, as follows:

<sup>&</sup>lt;sup>28</sup> Petition at 8-9.

<sup>&</sup>lt;sup>29</sup> *Id.* at 8.

The record in this case indicates that there is no proven track record for the development and implementation of large-scale IGCC generation plants like the one proposed by APCo. Evidence in this case also raises concerns whether large-scale IGCC generation plants are characterized by, among other things, (1) complexities attendant to a technology for which there is no proven track record for power plants of this size, (2) high initial capital costs compared to other coal-fired units, and (3) uncertainty surrounding performance and operating costs. Indeed, the costs and uncertainty surrounding the development and implementation of this technology, on this scale, for this purpose, appears to be a significant factor in APCo's failure to obtain any reasonable firm pricing, construction, or performance guarantees at this time.<sup>30</sup>

In sum, APCo's Application asked this Commission to give it a blank check to be paid by the ratepayers of Virginia in APCo's service territory, for a power plant of unproven development and implementation at the size and for the purpose proposed by APCo. As explained in the Final Order, however, this we will not do. This Commission has the statutory obligation to determine reasonableness or prudence, and the Company did not meet its burden based on the record in this proceeding. Thus, "[w]e cannot ask Virginia ratepayers to bear the enormous risks – and potential huge costs – of these uncertainties in the context of the specific Application before us." <sup>32</sup>

# West Virginia Public Service Commission

Finally, the Petition states that the Commission should reconsider its denial of the Application, because:

The Final Order ignores completely, and could have the effect of nullifying, the March 6, 2008 approval of this IGCC plant by the Public Service Commission of West Virginia and that Commission's recognition of the need for the plant, the viability of

<sup>&</sup>lt;sup>30</sup> Final Order at 12-13 (citations and footnotes omitted).

<sup>&</sup>lt;sup>31</sup> See, e.g., id. at 10-12.

<sup>&</sup>lt;sup>32</sup> *Id.* at 17.

IGCC technology, the need for an updated cost estimate and, importantly, the need for accommodation of regulatory requirements by that Commission and this Commission.<sup>33</sup>

We need not further address the deficiencies attendant to the Company's cost estimates in the context of the requests in the Application before us.

Moreover, this Commission's legal and ethical duty under the Constitution and statutes of Virginia is to apply the Constitution and statutes of Virginia. While we have the utmost respect for the actions of other state commissions, in particular our neighbors in West Virginia, and cooperate to the fullest extent at every opportunity with our neighbors, our statutory duty is to apply Virginia law. The actions of another state commission do not override Virginia law nor nullify our duty to apply Virginia law. APCo knows – or should know – this basic truism.

Accordingly, IT IS HEREBY ORDERED THAT:

- (1) APCo's Petition for Reconsideration and/or Rehearing is denied.
- (2) This case is dismissed.

AN ATTESTED COPY hereof shall be sent by the Clerk of the Commission to all persons on the official Service List in this matter. The Service List is available from the Clerk of the State Corporation Commission, c/o Document Control Center, 1300 East Main Street, First Floor, Tyler Building, Richmond, Virginia 23219.



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<sup>&</sup>lt;sup>33</sup> Petition at 2.